



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,939	12/09/2003	Katsuyoshi Suzuki	P24362	2388

7055 7590 02/07/2007
GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

GOMA, TAWFIK A

ART UNIT	PAPER NUMBER
----------	--------------

2627

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/07/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/07/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary

Application No.

10/729,939

Applicant(s)

SUZUKI ET AL.

Examiner

Tawfik Goma

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 28 and 29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 28 and 29 are drawn to a "program" *per se* and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in tangible computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed tangible computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical

“things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7, 12-13, 15-17, 21-22 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirayama (US 5835670).

Regarding claim 1, Hirayama discloses a method for playing back a record medium storing at least a sequence of audio information partitioned into a plurality of segments (fig. 6), comprising: reproducing audio information stored in each segment of said audio information Sequence (col. 10 lines 24-39); and reproducing prescribed audio information stored in a particular storage area for informing a user of an end of each segment before the playback of a next segment is started (H1, fig. 6 and col. 10 lines 40-49).

Regarding claim 2, Hirayama further discloses wherein said particular storage area is a prescribed area of said record medium (Header area, fig. 6).

Regarding claim 3, Hirayama further discloses wherein said particular storage area is a

Art Unit: 2627

prescribed storage area of a playback device which plays back said record medium (col. 10 lines 45-49). The audio information is generated from the playback device when H1 is encountered.

Regarding claim 5, Hirayama further discloses wherein said prescribed audio information is blank audio information for silence (col. 10 lines 40-49).

Regarding claim 6, further comprising: detecting a switching operation requesting switching of audio information sequence to be played back; and reproducing audio information stored in a segment of another audio information sequence corresponding to the segment being played back if the switching operation is received before the playback of the next segment (col. 6 lines 49-69).

Regarding claim 7, Hirayama discloses a method for playing back a record medium storing at least a sequence of audio information partitioned into a plurality of segments (fig. 6), comprising: reproducing audio information stored in each segment of said audio information sequence; and displaying prescribed image information for informing a user of approaching an end of the segment before the playback of a next segment is started (col. 10 lines 6-11).

Regarding claim 12, Hirayama further discloses detecting a switching operation requesting switching of audio information sequence to be played back; and reproducing audio information stored in a segment of another audio information sequence corresponding to the segment being played back if the switching operation is received before the playback of a next segment (col. 6 lines 49-69).

Regarding claim 13, Hirayama discloses a record medium storing at least a sequence of audio information partitioned into a plurality of segments (fig. 6), comprising: a particular area storing prescribed audio information to be reproduced for informing a user of an end of

Art Unit: 2627

each segment before the playback of a next segment is started (H1, fig. 6).

Regarding claim 15, Hirayama discloses wherein said prescribed audio information is blank audio information for silence (col. 10 lines 40-49).

Regarding claim 16, Hirayama discloses a playback device for playing back a record medium storing at least a sequence of audio information partitioned into a plurality of segments (fig. 1, fig. 6), comprising: an audio information reproduction module which reproduces audio information stored in each segment of said audio information sequence (211, 213, fig. 1 and fig. 6); and a prescribed audio information reproduction module which reproduces prescribed audio information stored in a particular storage area for informing a user of an end of each segment before the playback of a next segment is started by said audio information reproduction module (211, 213, H1, fig. 6 and col. 10 lines 41-49).

Regarding claim 17, Hirayama further discloses a storage module having said particular storage area for storing said prescribed audio information (505, 506, fig. 9 and col. 10 lines 45-49).

Regarding claim 21, Hirayama further discloses wherein said prescribed audio information is blank audio information for silence (col. 10 lines 45-49).

Regarding claim 22, Hirayama discloses a playback device for playing back a record medium storing at least a sequence of audio information partitioned into a plurality of segments (fig. 1, fig. 6), comprising: an audio information reproduction module which reproduces audio information stored in each segment of said audio information sequence (211, 213, fig. 1 and fig. 6); a storage module which stores prescribed image information for informing a user

Art Unit: 2627

of approaching an end of each segment (505, 506, fig. 9 and col. 10 lines 45-49); a display module which displays said prescribed image information (205, fig. 1 and col. 10 lines 6-11); a control module which controls said display module to display said prescribed image information before the playback of a next segment is started (204, fig. 1).

Regarding claim 27, Hirayama further discloses wherein said audio information reproduction module reproduces audio information stored in a segment of another audio information sequence corresponding to the segment being played back if a switching operation requesting switching of audio information sequence to be played back is received before the playback of the next segment (col. 6 lines 46-49).

Regarding claim 28, claim 28 pertains to a program of executing the method disclosed by claim 1 and is rejected for the same reasons of anticipation as applied above.

Regarding claim 29, claim 29 pertains to a program of executing the method disclosed by claim 7 and is rejected for the same reasons of anticipation as applied above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama et al (US 5835670) in view of Torazawa et al (US 6339571).

Regarding claims 4, 14, and 20, Hirayama fails to disclose wherein said prescribed audio information is audio information of an alarm sound. In the same field of endeavor, Torazawa

Art Unit: 2627

discloses playing an alarm sound as prescribed audio information. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the recording medium, apparatus and method by providing an alarm sound as the prescribed audio information. The rationale is as follows: One of ordinary skill in the art would at the time of the applicant's invention would have been motivated to provide alarm information in order to alert the user of the occurring event.

Claims 8-11, and 23-26 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Hirayama et al (US 583560) in view of Eiji (JP05-182431).

Regarding claims 8 and 23, Hirayama fails to disclose wherein the display of said prescribed image information is started when remaining playback time of the segment being played back decreased to a preset time length. In the same field of endeavor, Eiji discloses wherein a prescribed image is displayed when remaining playback time is below a limit (abstract and par. 22). It would have been obvious to one of ordinary skill in the art to modify the method and playback device taught by Hirayama by displaying an image when remaining playback time is below a limit as taught by Eiji. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to display the image when a limit is reached in order to alert the user that the current audio segment is close to ending.

Regarding claims 9 and 24, Hirayama fails to disclose wherein the display of said prescribed image information is cleared when the playback of the next segment is started. Eiji discloses clearing the displayed image when the next segment is started (par. 22). The rationale follows as in claims 8 and 23 above.

Regarding claims 10 and 25, Hirayma fails to disclose wherein said prescribed image information is image information of a counter which varies depending on the remaining playback time of the segment. In the same field of endeavor, Eiji discloses displaying a counter with the remaining time as a display (par. 17). It would have been obvious to one of ordinary skill in the art to modify the playback device and method disclosed by Hirayama and provide the counter display taught by Eiji. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to provide the remaining time on a counter display in order to provide the user with accurate information as corresponding to the exact amount of time left on the segment.

Regarding claims 11 and 26, Hirayama fails to disclose wherein said prescribed image information is lighting/blinking of one or more light emitting modules which varies depending on the remaining playback time of the segment. In the same field of endeavor, Eiji discloses lighting/blinking the LED as an indicator of remaining time (pars. 22 and 23). The rationale follows as in claims 8 and 23 above.

Claims 18-19 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Hirayama et al (US 583560) in view of Cookson et al (US 5598276).

Regarding claim 18, Hirayama further discloses a switching operation reception module which receives a switching operation requesting switching of audio information sequence to be played back (col. 13 lines 32-54); a switching module which switches the audio information sequence to be played back when said switching operation reception module received the switching operation (col. 13 lines 32-65 and fig. 4). Hirayama fails to disclose a position storage module which stores the position of playback before the switching of the audio

Art Unit: 2627

information sequence; a control module which determines a segment to be played back based on the position stored in the position storage module and the audio information sequence switched by said switching module. In the same field of endeavor, Cookson discloses a position storage module which stores the position such that audio is synched when switching occurs (col. 35 lines 48-67). It would have been obvious to one of ordinary skill in the art to modify playback device disclosed by Hirayama by providing the markers taught by Cookson. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to provide markers in order to maintain synchronization of the various data such as video, audio and subtitle data.

Regarding claim 19, Hirayama further discloses wherein said audio information reproduction module reproduces audio information stored in a segment of another audio information sequence corresponding to the segment being played back if the switching operation is received by said switching operation reception module before the playback of the next segment (col. 13 lines 55-65).


Conclusion

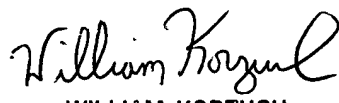
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


T. Goma
2/1/2007


WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600